

Notice of Allowability

Application No.

10/609,179

Examiner

Cachet I. Sellman

Applicant(s)

MOBLEY ET AL.

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Request for Continued Examination (RCE) on 6/5/2007.
2. ☒ The allowed claim(s) is/are 1-3,5,6 and 8-17.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/5/2007 has been entered.

Response to Arguments

2. The applicant has amended claim 1 to include the new limitation of using an externally stabilized dispersion of a nonionizable polyurethane where the nonionizable polyurethane substantially fails to have ionic or nonionic hydrophilic pendant groups and the polyurethane dispersion is not mixed with another dispersion or emulsion (support can be found on page 5, lines 32-25 and page 8 lines 25-27 in the specification dated 6/27/2003).

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. As stated in the Admitted Prior Art (APA), U.S. patents 2968575 (Mallonee), 5539021 (Pate et al.), 5688842 (Pate et al.) and Jakubowski et al. (US 5959027) all disclose externally stabilized dispersions of nonionizable polyurethane which substantially fail to have ionic or nonionic hydrophilic pendant groups however, they all disclose mixing the polyurethane dispersion with another dispersion or emulsion. Koonce et al. (US 6451908 B1) discloses forming a polyurethane film which

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comprises the steps of first forming a nonionic prepolymer which comprises a diisocyanate, an active hydrogen and a monol followed by forming an aqueous dispersion of the prepolymer in the presence of a surfactant in the absence of an organic solvent (abstract). Koonce et al. teaches that films formed with this composition do not coagulate prematurely and have increased shear stability (abstract). The films are used in medical applications as well in some non medical items i.e. non-medical gloves, swim caps, tool handle grips, industrial caps, and plugs, windshield wiper boots, toy balloons, toys, electrical parts, covers and gaskets (col. 6, lines 1-10). Koonce et al. does not teach the use of the polyurethane film in synthetic/ artificial leathers.

Allowable Subject Matter

4. Claims 1-3, 5-6, and 8-17 are allowed.
5. The following is an examiner's statement of reasons for allowance: As stated above, and as shown in the previously cited reference of Kukkala et al. (US 5859111) externally stabilized dispersions of nonionizable polyurethane that substantially fails to have ionic or nonionic hydrophilic pendant groups are well known in the art. However, these references fail to teach forming these dispersions without mixing with another dispersion or emulsion. Koonce et al. teaches forming the polyurethane dispersion of the applicant without the addition of another dispersion or emulsion.

Koonce et al. fails to teach using this dispersion with a non-woven or woven textile for the use as a synthetic leather or exposing the dispersion to water with a multivalent cation neutral salt coagulant.

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Spek et al. discloses a process for forming a synthetic leather using a nonionizable polyurethane which is coagulated using heat or with an electrolyte i.e. multivalent cation neutral salt in water (col. 2, lines 12-col. 4, line 32 and col. 6, lines 62-63). Spek et al. fails to teach the nonionizable polyurethane which is externally stabilized with a surfactant.

There is no motivation to combine the teachings of a nonionizing polyurethane with an external surfactant without any additional dispersion/ emulsions of Koonce et al. with Spek et al. whom teaches using a nonionizing polyurethane on a textile and coagulating using a cation neutral salt to form a synthetic leather therefore the claims are allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cachet I. Sellman whose telephone number is 571-272-0691. The examiner can normally be reached on Monday through Friday, 7:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



cis

Cachet I Sellman
Examiner
Art Unit 1762

/William Phillip Fletcher III/
Primary Examiner

July 22, 2007